



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,593	09/27/2001	Hideki Oyama	L7961.01101	1046

7590 11/04/2003
STEVENS, DAVIS, MILLER & MOSHER, L.L.P.
Suite 850
1615 L Street, N.W.
Washington, DC 20036

EXAMINER

SAMPLE, DAVID R

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/963,593	Applicant(s) OYAMA ET AL.	
	Examiner David Sample	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,7,15-18,21-25 and 31-33 is/are allowed.
- 6) ☒ Claim(s) 1-5,9-11,13,14,19,20 and 26-30 is/are rejected.
- 7) ☒ Claim(s) 6,8,12,17 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

Claims 6, 17 and 26 are objected to because of the following informalities:

The wording "forming ... to a shaped hollow article" in claims 6, 17, and 26 is not idiomatic English. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 26-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 26 and 28, "the bulb having a desired shape" lacks antecedent basis. Moreover, one of ordinary skill in the art cannot determine the scope of the invention sought to be patented with respect to the phrase "desired shape".

Claims 27 and 29-30 are rejected for failing to correct the deficiencies of claims 26 and 28.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 1755

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13, 14, 19 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 13, and 19 recite "2.2 wt% or more SrO". There is insufficient written description in the specification, as originally filed, for this claim recitation. The relevant portions of the specification are the reference to an " R'_2O -RO-SiO₂" glass and the examples which include SrO in the glass. This is insufficient adequate written support for the range "2.2% or more". This range encompasses SrO contents of as high as 99%, and there is no recognition in the application, as originally filed, that the present invention relates to such a concept. The examples incorporate SrO in amounts of 2.2 to 6.0 wt%. Moreover, a glass referred to as an " R'_2O -RO-SiO₂" does not suggest to the skilled artisan the concept that the glass may have unlimited amounts of alkaline earth metals in the glass. To the skilled artisan, the term " R'_2O -RO-SiO₂" glass indicates that the glass is a silicate glass containing a substantial portion of silica and lesser amounts of R'_2O and RO. For the same reasons claims 14 and 20 are rejected for lacking adequate written support for the recitation "2.5% or more BaO".

Claim Rejections - 35 USC § 102

Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Bryant et al. (US Patent No. 6,469,443 B).

Bryant et al. discloses an amber glass for use in automotive lamps. See the abstract. The glass is an alkali metal oxide-alkaline earth oxide silicate glass containing the recited amounts of SrO and BaO. See col. 2, lines 5-18. The glass contains 0.07 wt% MoO₃ and 0.37 wt% SO₃. Id.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because the papers do not provide adequate written support for the rejected claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al. (US Patent No. 5,958,811).

Sakaguchi et al. teaches an alkali metal oxide-alkaline earth oxide-silicate bronze glass. See the abstract. The glass may contain 0 to 1 wt% MoO₃ (among others) and 0 to 1 wt% S as SO₃. See col. 4, lines 48-53.

Sakaguchi et al. differs from the present claims in the following ways:

- (1) Sakaguchi et al. fails to disclose that the glass is used "for lighting";

Art Unit: 1755

(2) Sakaguchi et al. fails to disclose identical ranges for MoO₃ and S; and

(3) Sakaguchi et al. discloses MoO₃ among a list of four components.

As to difference (1), the recitation that the glass is "for lighting" is a statement of intended use and must result in structural difference between the claim and the prior art for the claims to be patentable. See MPEP 2111.02. No structural difference can be discerned between the claimed glass and the prior art glass.

As to difference (2), Sakaguchi et al. discloses overlapping ranges of MoO₃ and S with the glass of the present invention. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

As to difference (3), the reference discloses MoO₃ among a list of four oxides. To one of ordinary skill in the art, it would have been obvious to have used any of the oxides of the reference, including MoO₃ because the oxides were disclosed as useable in the reference's glass.

The recitations of instant claims 3-5 and 9-11 can be found in the reference at column 3, line 57 to column 4, line 18.

Response to Arguments

Applicant's arguments filed August 21, 2003 have been fully considered but they are not persuasive.

As to the rejection over Bryant et al. (US Patent No. 6,469,443), applicants cannot rely upon their claim for foreign priority because claims 13 and 14 are not entitled to priority. The claims are not entitled to priority for the same reasons the claims are not supported by the present specification (see the above rejection under 35 U.S.C. § 112, first paragraph). Specifically, the

Art Unit: 1755

foreign priority document fails to provide adequate written support for the recitation that the glass contains "2.2 wt% or more SrO" or "2.5% or more BaO".

As to the rejection over Sakaguchi et al. (US Patent No. 5,958,811), applicants assert that the reference relates to automotive window glasses, and is therefore a non-analogous art. This argument appears to conflate two issues: analogous art and weight placed on an intended use recitation. However, the two issues relate to "structural similarity and differences" between the prior art and the claimed invention. As noted previously, a statement of intended use must result in a structural difference between the prior art and the claims to render the claims patentable. See MPEP 2111.02. In the context of analogous art, similarities in structure and function are examined in determining analogous and non-analogous art and its relation to PTO classification. See MPEP 2141.01(a).

In either case (analogous art or intended use), there appears to be no structural difference between the prior art and the claimed invention. In the context of the present claims, the "structural difference" would need to be some difference in composition. Such a difference would suggest a non-analogous art, or structure implied by the intended use that would patentably distinguish the claims and the prior art. There appears to be no difference in composition between the prior art and the claimed invention, nor do applicants point to any differences.

Applicants appear to argue that the phrase "for use in lighting" implies a structure to the glass composition that places the glass outside the teachings of Sakaguchi et al. More specifically, applicants assert that the glass of the reference relates to a glass employed for blocking the transmission of radiation whereas the present invention is directed to forming

Art Unit: 1755

radiation transmitting glasses. This argument is not deemed persuasive. Sakaguchi et al. relates to glasses that attempt to block UV and IR radiation while maintaining a high light transmittance (greater than 70%). See the abstract. So, Sakaguchi et al. relates to light transmitting glasses.

Lastly, applicants appear to assert unexpected results in that the claimed amounts of MoO_3 and S result in unexpectedly improved properties in avoiding black crystallites. This argument is not deemed persuasive. For unexpected results to be persuasive, the showing must be commensurate in scope with the claims. See MPEP 716.02(d). The present claims broadly relate to " $\text{R}'_2\text{O-RO-SiO}_2$ " glasses but provide results for very small subset of these glasses.

Allowable Subject Matter

Claims 6, 7, 15-18, 21-25, and 31-33 are allowed subject to the correction of any of the above-noted objections. Claims 8 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 26-30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claims 6 and 7 are allowable for the reasons stated in the prior action.

Claims 15 and 16 are allowable because the prior art fails to disclose or suggest a yellow colored " $\text{R}'_2\text{O-RO-SiO}_2$ " glass containing the recited amounts of MoO_3 and S.

Claims 8, 12, 17, 18, 21-33 are allowable because the prior art fails to disclose or suggest a " $\text{R}'_2\text{O-RO-SiO}_2$ " glass in the shape of a tube or bulb containing the recited amounts of MoO_3 and S, or methods of making such products.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

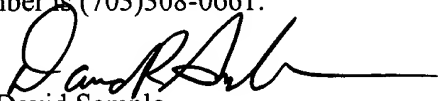
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (703)308-3825. The examiner can normally be reached on Monday to Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (703)308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Art Unit: 1755

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.



David Sample
Primary Examiner
Art Unit 1755

DRS
November 3, 2003